Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A digital broadcasting apparatus for generating a digital broadcasting signal based on data of source information and modulating the same to a predetermined broadcasting frequency for output, comprising:

a sub-signal generating circuit for generating a sub-signal for controlling signal transmission;

a random sequence generating circuit for generating a pseudo-random sequence using an initial value of a random number code set based on said broadcasting frequency;

a sub-signal modulating circuit for modulating the sub-signal using the pseudo-random sequence generated by the random sequence generating circuit; and

a modulating circuit for performing modulation according to a predetermined modulation scheme using a main signal generated based on the data of source information and output signal of the sub-signal modulating circuit,

wherein a bandwidth of said broadcasting frequency is divided into a plurality of channels with each channel of said plurality of channels being assigned a predetermined channel number, and

wherein said random sequence generating circuit sets an initial value of a random number code for generating said pseudo-random sequence based on said channel number.

2. (Currently Amended) A digital broadcasting apparatus as set forth in claim 1, wherein said modulating circuit is an OFDM modulating circuit for performing OFDM modulation using

said main signal and output signal of said sub-modulating circuit, and associating each channel with an OFDM segment.

3. (Original) A digital broadcasting apparatus as set forth in claim 1, wherein said data of source information is sound data obtained by encoding a sound signal.

4. (Canceled)

5. (Currently Amended) A digital broadcasting apparatus for generating a digital broadcasting signal based on data of source information and modulating the same to a predetermined broadcasting frequency for output, comprising:

a frequency interleaving circuit for frequency interleaving a main signal generated according to said data of source information by using a parameter set based on said broadcasting frequency; ~~and~~

a modulating circuit for modulating said frequency-interleaved main signal based on a predetermined modulation scheme including generating a pseudo-random sequence,

wherein a bandwidth of said broadcasting frequency is divided into a plurality of channels with each channel of said plurality of channels being assigned a predetermined channel number, and

wherein said modulating circuit sets an initial value of a random number code for generating said pseudo-random sequence based on said channel number.

6. (Currently Amended) A digital broadcasting apparatus as set forth in claim 5, further comprising:

a sub-signal generating circuit for generating a sub-signal for controlling signal transmission; and

a sub-modulating circuit for modulating said sub-signal by using ~~a~~ said pseudo-random sequence ~~generated by using an initial value of a random number code set based on the broadcasting frequency~~ and for supplying the modulated signal to said modulating circuit.

7. (New) A digital broadcasting apparatus as set forth in claim 1, further comprising

a frequency interleaving circuit for frequency interleaving said main signal using parameters, said parameters set based on said channel number.

8. (New) A digital broadcasting apparatus as set forth in claim 2, wherein center frequencies of said plurality of channels are offset by a predetermined value.

9. (New) A digital broadcasting method for generating a digital broadcasting signal based on data of source information and modulating the same to a predetermined broadcasting frequency for output, comprising:

generating a sub-signal for controlling signal transmission;

generating a pseudo-random sequence using an initial value of a random number code set based on said broadcasting frequency;

modulating the sub-signal using the pseudo-random sequence;

performing modulation according to a predetermined modulation scheme using a main signal generated based on the data of source information and the modulated sub-signal;

dividing a bandwidth of said broadcasting frequency into a plurality of channels with each channel of said plurality of channels being assigned a predetermined channel number; and

setting an initial value of a random number code for generating said pseudo-random sequence based on said channel number.